

Figure 1

NOVEL EXPRESSION VECTORS CONTAINING ACCESSORY MOLECULE LIGAND GENES AND THEIR USE FOR IMMUNOMODULATION AND TREATMENT OF MALIGNANCIES AND AUTOIMMUNE DISEASES Inventor(s): Thomas Kipps, et al.; Serial No.: 08/982,272 Filing Date: December 1, 1997; Atty. Docket No.: 041673-2069

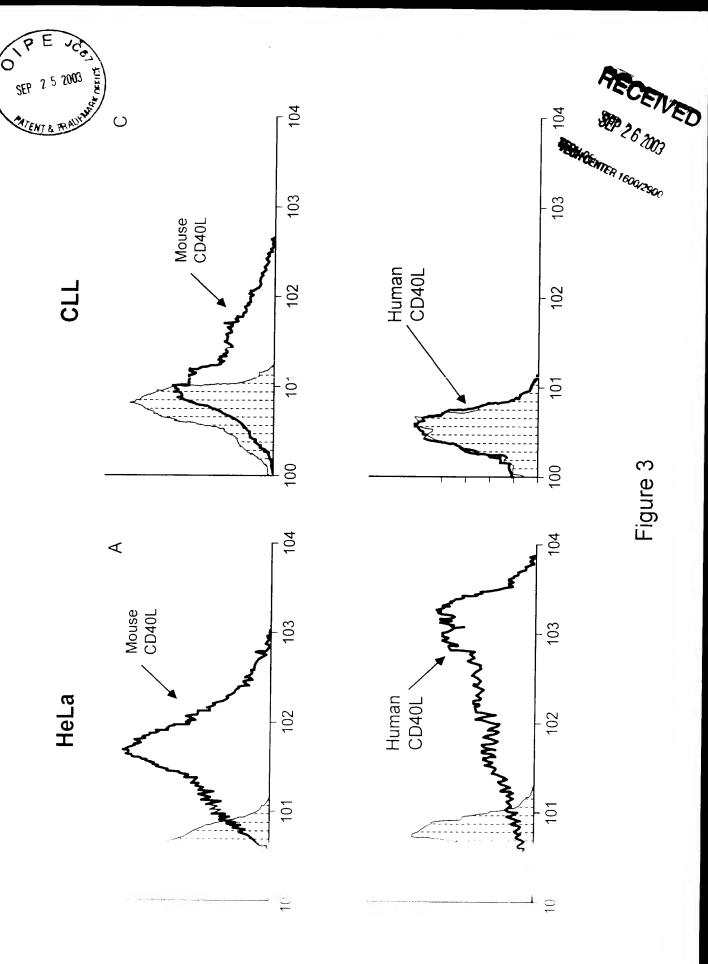


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		ANGE		
(-)	TM	EXCHANGE	(+) C
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SD40L;	EX		SD40L;	EX
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Figure 2

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NOVEL EXPRESSION VECTORS CONTAINING ACCESSORY MOLFCUIE LIGAND GENES AND THEIR USE FOR IMMUNOMODULATION AND TREATMENT OF MALIGNANCIES AND AUTOIMMUNE DISEASES Inventor(s): Thomas Kipps, et al.; Serial No.: 08/982,272 Filing Daie: December 1, 1997; Atty. Docket No.: 041673.2069



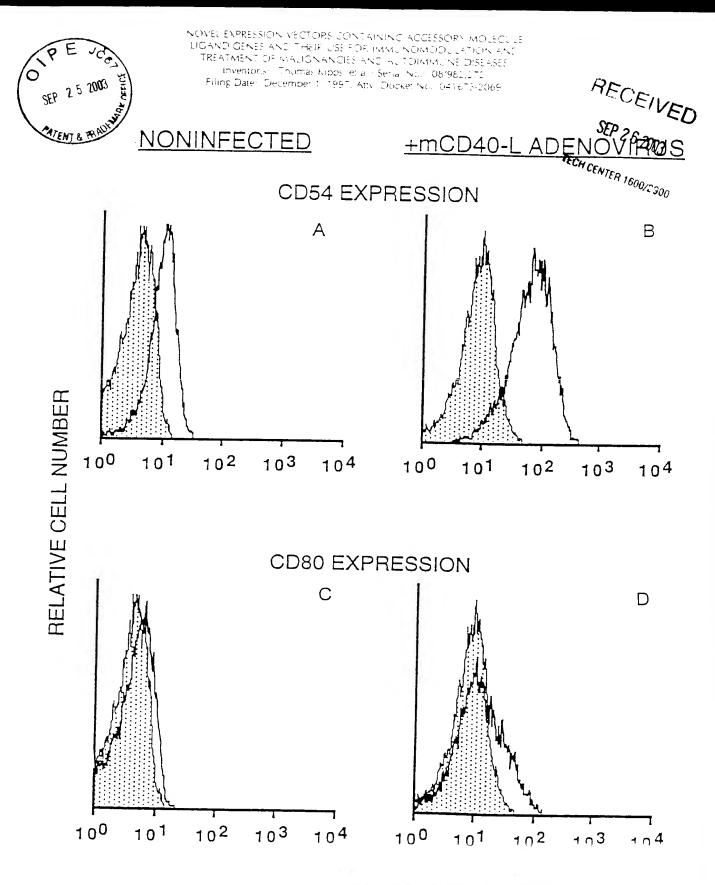


Figure 4



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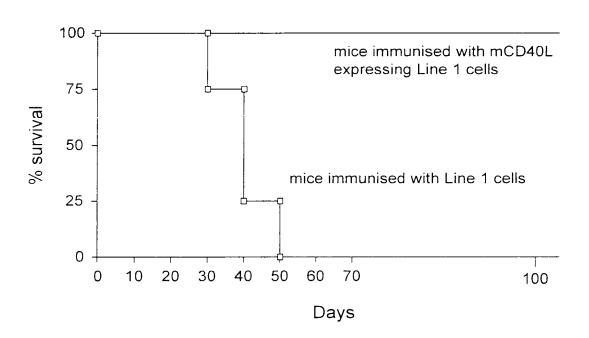


Figure 7

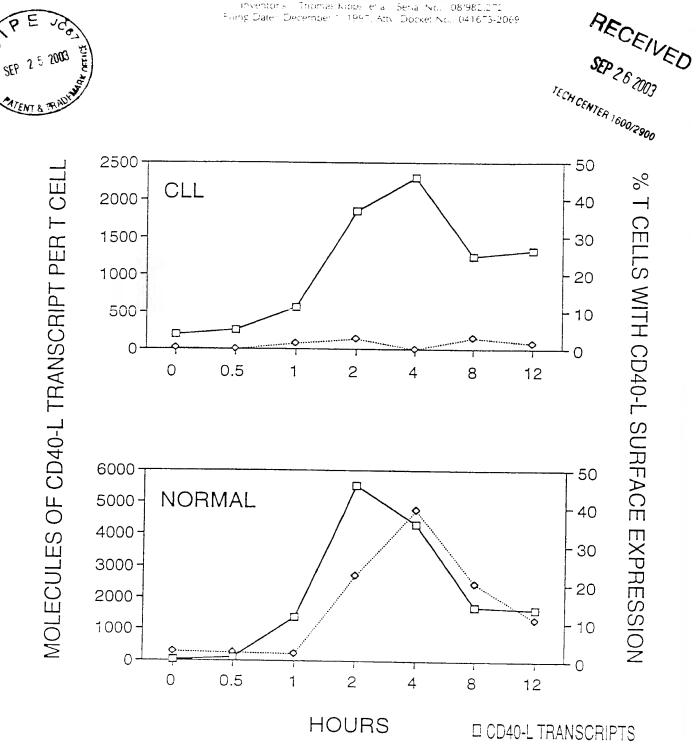
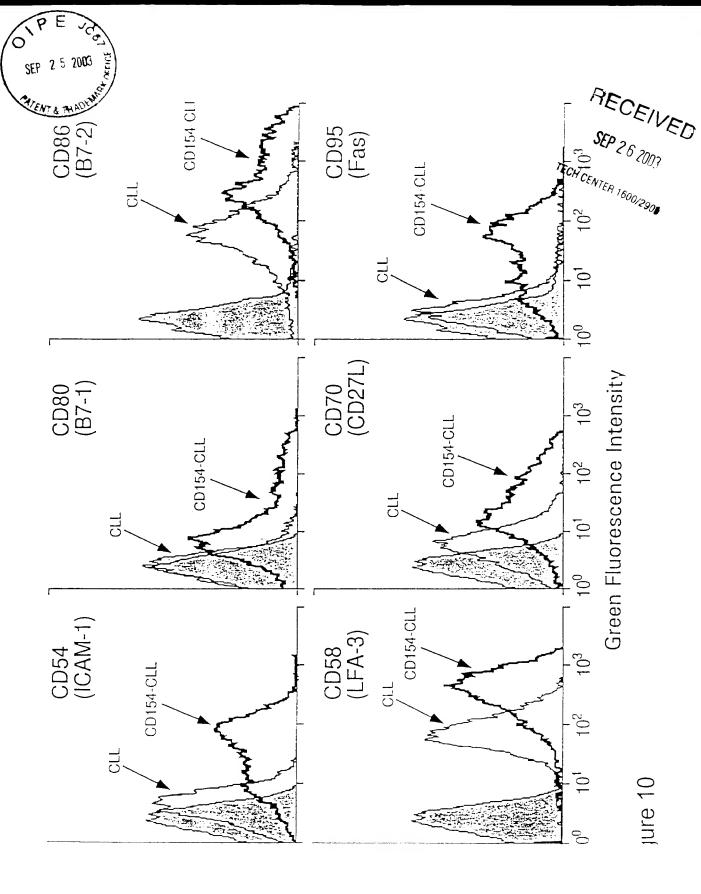


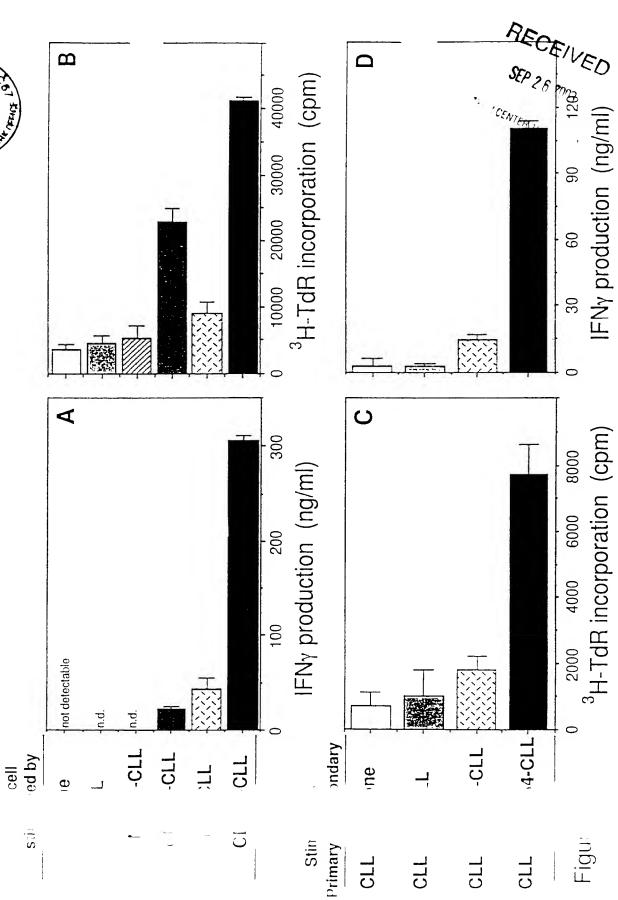
Figure 8

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NOVIT EXPRESSION VECTORS CONTABING ACCUSORY MOHECULT HGAND GENES AND THEIR USE FOR IMMUNOMORODICATION AND IRFAMENT OF AMAIGNACHES AND AUTOIMMUNE DISEASES Inventor(s): Thomas kipps, et al.; Senal No.: 08/982,272 Filing Date: December 1, 4997, Atty. Docket No.: 041673-2069









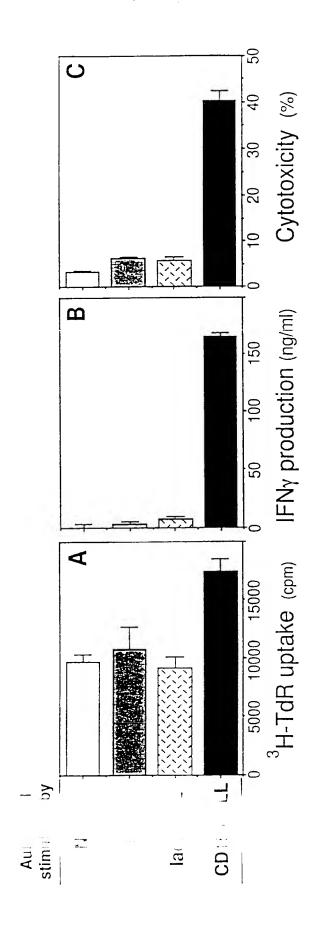
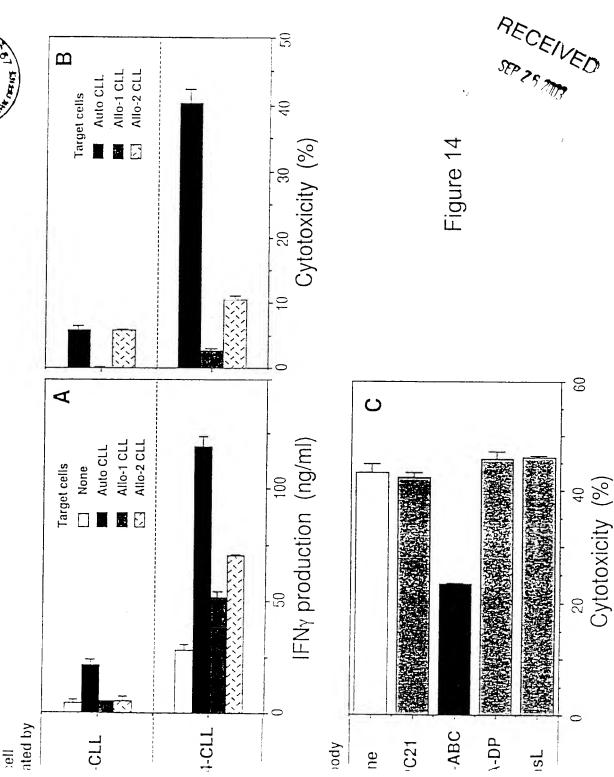


Figure 13



FROYTE FAPE SSION VECTORS CONTAINING ACCESSORY MOLECURE HIGARD GERLS AND THEIR USE FOR IMMUNOMORIDIATION AND LELATARED OF MALIGHARICES AND ALTICINAMURE DISEASES Inventor(s): Thomas Kipps, et al.; Senal No.: 08/982,272 Hing Date: December 1, 1997; Atty. Docket No.: 041673-2069





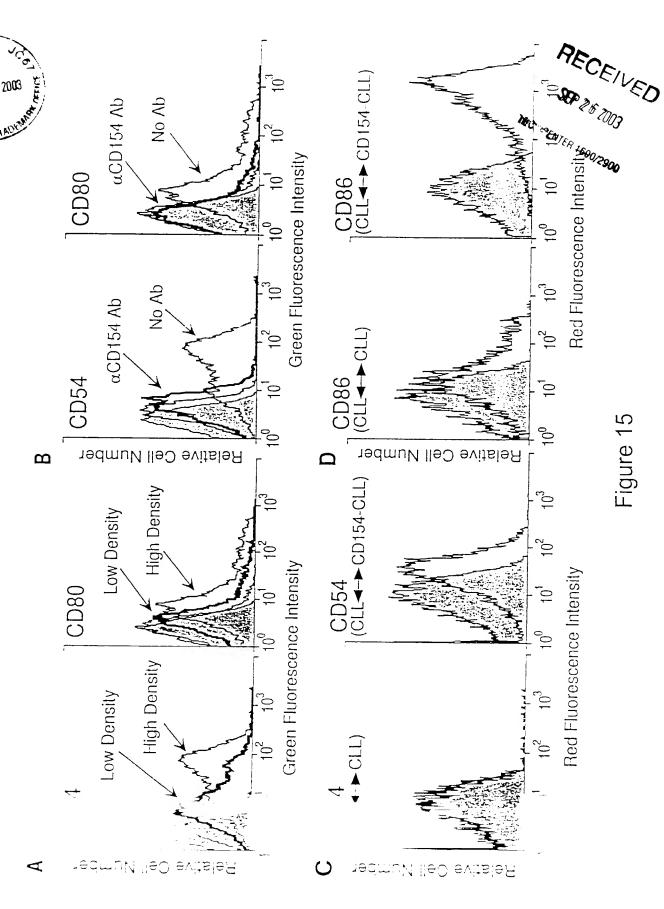
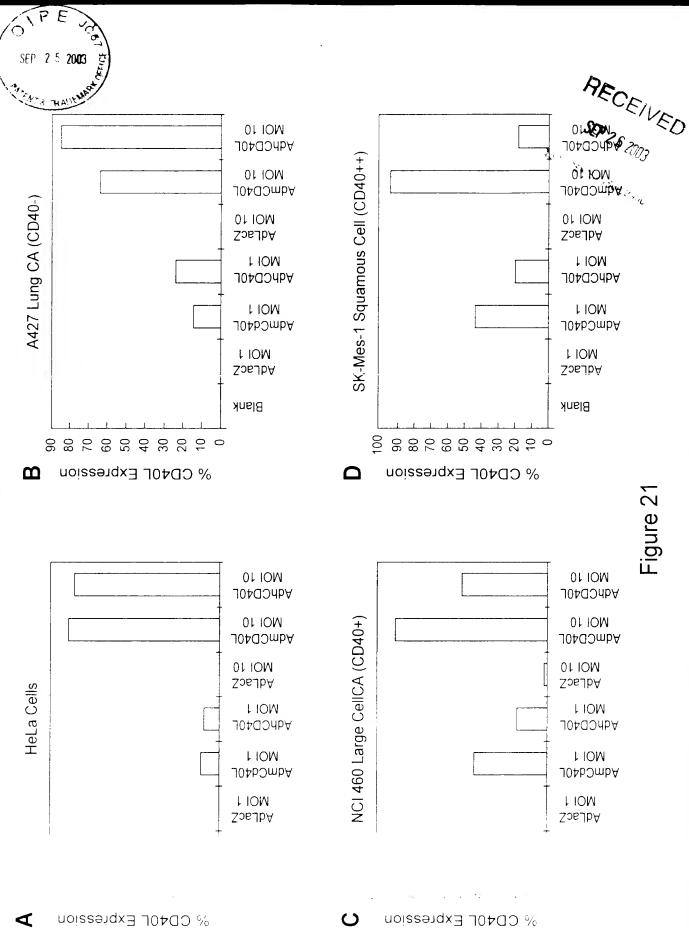
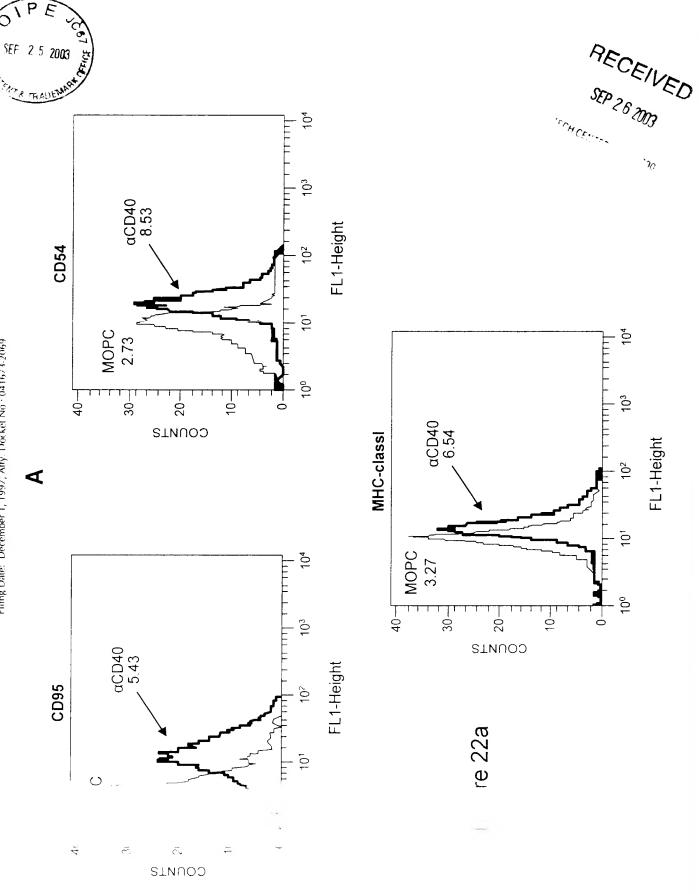


Figure 15

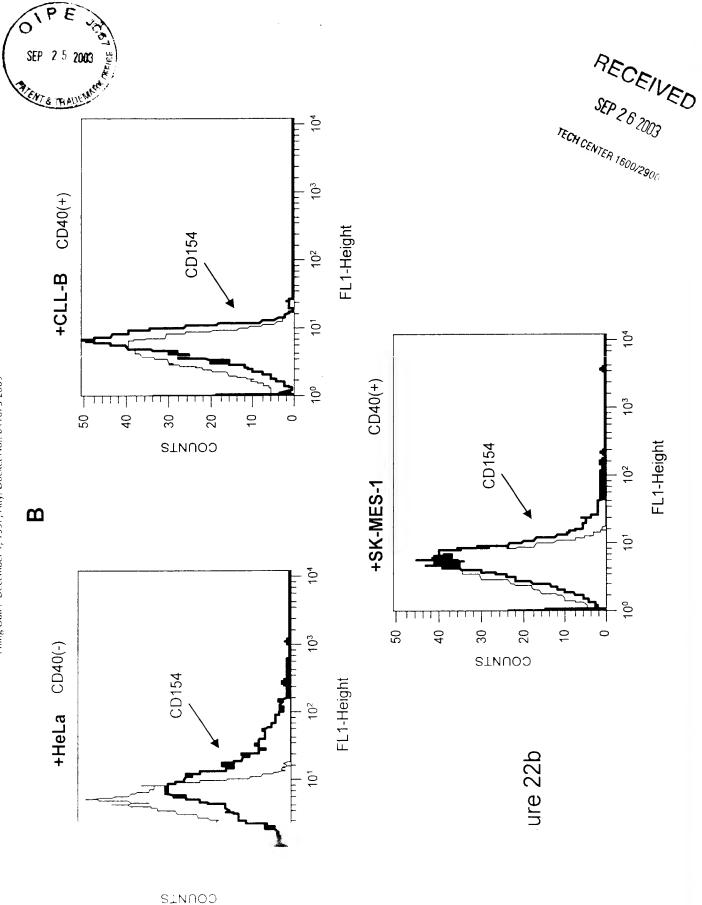
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NOVFL EXPRESSION VECTORS CONTAINING ACCESSORY MOLECULF LICAND GENES AND THEIR USE FOR IMMUNOMODULATION AND TREATMENT OF MALIGNANCIES AND AUTOIMMUNE DISEASES Inventor(s): Thomas Kipps, et al.; Serial No.: 08/982,272 Filing Date: December 1, 1997, Atty. Docket No.: 041673-2069



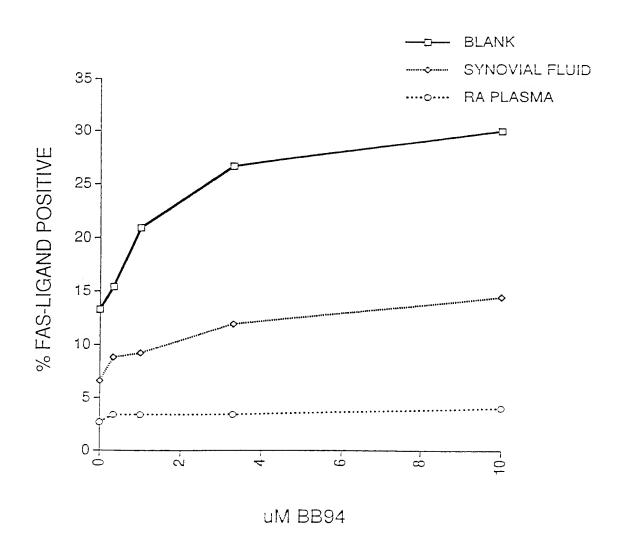
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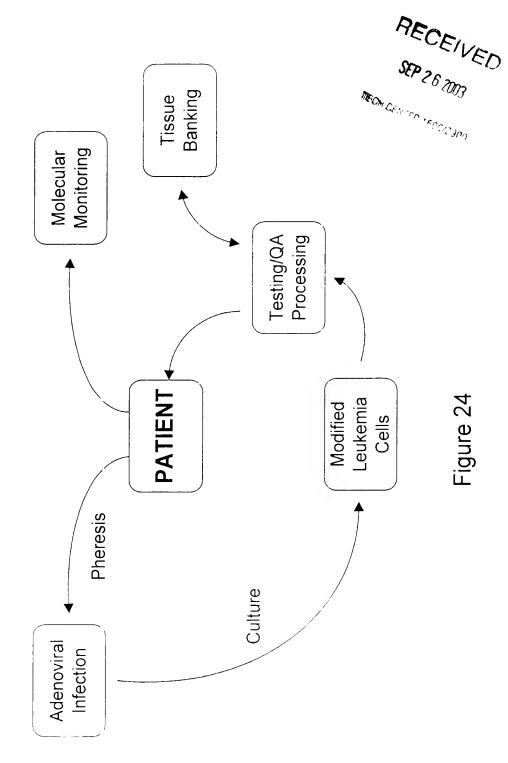
RA SYNOVIAL FLUID AND PLASMA INHIBITION OF FAS-LIGAND



rigure 23



Gene Therapy of Leukemia



NOVITEMPESSION VICTORN CONTAINING ACCESSORY MOTECULE HIGARD GENES AND THER USE FOR IMMUNOMODIUM AND TREATMENT OF MALIGNATCHS AND AUTOMANUME DISFASTS Inventor(s): Thomas Kipps, et al.; Serial No.: 08/982,272 Filing Date; December 1, 1997; Atty. Docket No.: 041673-2069

Matrix Metalloproteinase Cleavage Sites

Cleavage P ₃ P ₂ P ₁ P' ₁ P' ₁ P' ₂ P' ₃ enases Interstitial Collagenase P ₃ P ₄ P' ₁ P' ₂ P' ₃ Pro Leu Gly Met Arg Met/Ala Leu Met/Tyr His Leu Leu Gly Ala Val/Gly Glu lle Phe Val Glu Asp Phe Phe Ala Phe Gly Glu Glu Glu Glu Gly Asp Phe Phe Ala Phe Gly Glu Asp Phe Ala Val/Gly Arg Ala Asn Tyr/Val Ser Pro Inot K,E,W] Asn Neutrophil Collagenase P ₃ P ₂ P ₁ P' ₁ P' ₁ P' ₂ Pro Inot K,E,W] Asn Ala Leu Gln GlyHis lle Leu Met Phe		Ç.		ŗ	Arg	Lvs	Glu	<u>e</u>	Ğİ∧	Ser	Glu	Ala			بَ	Arg	Gh			Ş
Cleavage P ₃ P ₂ P ₁ P ₁ restitial Collagenase P ₃ P ₂ P ₁ P ₁ restitial Collagenase Red Met/Tyr His Leu Gly Met His Leu Gly His Ille His Leu Val P ₁ P ₁ P ₂ Glu Tyr Hrophil Collagenase S ₃ P ₂ Glu Tyr His Leu Val P ₄ P ₁ Figure Val Phe		چ		۳,	Met/Ala	Ğly	Val	Ser	Glu	Phe	Arg	Pro			ڄ	Ğİ	Met	Ala		
Cleavage P ₃ P ₂ P ₄ P ₅ P ₇ P ₇ P ₇ P ₇ P ₈ P ₈ P ₉ P ₉ P ₁ P ₁ P ₂ P ₂ P ₃ P ₂ P ₄ P ₁ P ₂ P ₁ P ₂ P ₃ P ₄ P ₅ P ₄ P ₅ P ₁ P ₂ P ₃ P ₄ P ₅ P ₅ P ₅ P ₆ P ₇		P. 2		P' ₂	Arg	Leu	Phe	Trp	Glu	Ala	Val/Gly	Ser	Asn		P, ₂	Ala	ren	Trp		
Cleavage P ₃ P ₂ P ₃ P ₂ P ₄ P ₅ P ₇ P ₇ P ₇ Leu Met/Tyr Val/Gly Sp Ile er Gln/Arg Asp Sly Glu Asp Sly Glu Asp Sly Clu Asp Clu As		. Г		Ď.	Met	ren	lle	Gln	Pro	Phe	Ala	Tyr/Val	[not K,E,W]		ŗ.	Tyr	<u>le</u>	ren	Val	Phe
Cleavage P ₃ P ₂ P ₃ P ₂ Interstitial Collagenase P ₃ P ₂ Pro Leu Met/Tyr Ala Val/Gly Asp Ile Ser Gln/Arg Glu Asp Gly Glu Arg Arg Ala Neutrophii Collagenase P ₃ P ₂ Pro Leu Gln Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Asp Glu Arg Arg Arg Arg Arg Arg Arg Arg Arg Arg		₫.		σ.	Gly	His	Glu	Tyr	Ala	Phe	Gln	Asn			₫.	Glu	Gly/His	Ala		
enases Interstitial (P ₃ Pro Leu Ala Asp Ser Glu Gly Arg Arg Pro Leu	Cleavage ↓	2	Sollagenase	$\frac{P}{2}$	ren	Met/Tyr	Val/Gly	lle	GIn/Arg	Asp	Glu	Ala		Collagenase	P_{2}	ren	Gln			
		ር	e nases Interstitial (ص ٔ	Pro	ren	Ala	Asp	Ser	Glu	Gly	Arg		Neutrophil (ሚ	Pro	ren			•

Ala

same as MMP-1)

Arg

NOVEL EXPRESSION VECTORS COLLIABIHING ACCESSORY MOTECULE LIGAND CENESARD HITE USE FOR IMMUNOMODULATION AND TREATMENT OF MALIGHANICIES AND AUTOIMMUNE DISEASES. Inventor(s): Thomas Ktpps, et al.; Serial No.: 08/982,272 Filing Date: December 1, 1992; Atty, Docket No.: 041673-2069

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	р, <u>'</u>	Gh	Arg	His	Pro					P' ₄	TEL.						P.'	Thr		Pro		2	Na	75	CY C	ENTE	~ < (S AU	?? p	
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	P' ₂	Ala/Leu	Phe/Trp	Gly	Arç/Gln	His	Val			بر د م	Glu Ala/Len/Phe		Trp/Gly				P,2	Arg	Leu/Phe	Trp	Val	<u>(</u>	His/Met		Glu/Ser/Thr					
	P.	Leu	lle/Phe	Val/Met	Ala	Glu	Gln/Asn	Ser		ŗ.	Leu IIa/Pha		Val/Met	Ala			<u>,</u>	Leu	Phe	Trp/Tyr	He	10/	Met)	Glu				Figure 28B	
	٣.	Gly	Asn	Ala	His	Leu	Tyr			₫.	Gly								Ala				8H. 8H.		Leu/Pro		Lys/Tyr/Arg		Figu	
	P	Arg	Gln	ren	Ala	Lys	<u>e</u> :	HIS.		. کے	Arg		Leu				P ₂	Phe	Leu/Met	Tyr	Pro/Gly/Glu	ď	Ala		Ser					
ses Gelatinase A	٩	Pro	Ala	Arg					Gelatinase B	<u>ດ</u> ີ (1,10				sins	elysin 1		Pro			Leu		Phe		Arg		Ser/Gly n			
Gelatinases MMP-2	مِ ً	Gly	lle	Pro	Arg	l.eu			MMP-9	<u>_</u>		3ln/Arg			Stromelysins	.1MP-3	~ *	dsy	ity iln/Arg	en o	2	ilu/val	s/s	η//Asp	l g	er/Lys/Phe	ro/Met la/Phe/Gln			

NOVEL EXPESSION VECTORS CONTAINING ACCESSORY MOLLCULE LICAND CENES AND THEIR USE FOR IMMUNOMODULATION AND THEIR USE FOR IMMUNOMODULATION AND INSTAND TREATMENT OF MALICITANICIES AND AUTOIMMUNE DISEASE Inventoris: Homas Kipps, et al.; Serial No.: 08/982,272 Filing Date: December 1, 1992; Atty. Docket No.: 041673-2069



P' Glu Ala	P' ₄ Gin
P' ₃ Ala Glu	P' ₃ Ala Val/Arg/Met Gly
P', Gln Val	P', Arg Met Gln
P ₁ ∥e Leu	P'1 Leu Met
P. His Leu	P, Glu Met/Ala Pro/Gln Gly
. 등 문	P ₂ Leu Gln Val
Stromelysin 2 P ₃ Ala Pro	Matrilysin P ₃ Pro Leu
0	'n

Figure 28C

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